REMARKS

Claims 1-25 are pending in the application. The Examiner's reconsideration of the rejections in view of the amendments and remarks is respectfully requested.

Claims 21 and 25 have been rejected under 35 U.S.C. §112, first paragraph, as failing to comply with the written description requirement. The Examiner stated essentially that "the X-data field and the Y-data field overlap, and wherein an area of overlap is the microprocessor data field" was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor, at the time the application was filed, had possession of the claimed invention.

Respectfully, such a limitation is supported by, at least, Figure 3, wherein the X data cache and the Y data cache may both be used to access the MCU data field. Reconsideration of the rejection is respectfully requested.

Claims 1-20 and 22-24 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Chauvel et al. (U.S. Patent No. 6,369,855) in view of Sussman et al. (U.S. Patent No. 5,686,960). The Examiner stated essentially that the combined teachings of Chauvel and Sussman teach or suggest all the limitations recited in Claims 1-24.

Claims 1, 5, 9, and 17 are the independent claims.

Claims 1, 5, 9, and 17 claim, *inter alia*, "an X-data cache for storing a first data group managed by the coprocessor; and a Y-data cache for storing a second data group managed by the coprocessor."

Chauvel teaches an audio-visual circuit (see Abstract). Chauvel fails to teach or suggest "an X-data cache for storing a first data group managed by the coprocessor, and a Y-data cache for storing a second data group managed by the coprocessor" as claimed in Claims 1, 5, 9, and 17. Chauvel teaches that the Communications Co-Processor "module 280 contains a collection of buffers, control registers, and control logic for various interfaces, such as UARTs, IR/RF, I.sup.2 C, and JTAG. All the buffers and registers are memory mapped and individually managed by the ARM CPU 220" (see col. 56, lines 56-60). The Communications Co-Processor of Chauvel handles communication signals and operates communication interfaces, the Communications Co-Processor is not responsible for memory management - Chauvel's system manages data using the ARM CPU. Therefore, Chauvel fails to teach or suggest cache managed by a co-processor, essentially as claimed in Claims 1, 5, 9, and 17.

Sussman teaches an image input device (see Abstract). Sussman fails to teach or suggest "an X-data cache for storing a first data group managed by the coprocessor, and a Y-data cache for storing a second data group managed by the coprocessor" as claimed in Claims 1, 5, 9, and 17. Sussman teaches a dedicated image processor (see col. 6, lines 36-38). The image processor of Sussman controls an X cache and a Y cache. Sussman does not teach or suggest a X-data cache not Y-data cache for storing data managed by a coprocessor. Further, nowhere does Sussman teach that the image processor manages data of another processor – the image processor is not analogous to a co-processor as claimed in Claims 1, 5, 9, and 17. Therefore, Sussman fails cure the deficiencies of Chauvel.

The combined teachings of Chauvel and Sussman teach memory managed by a CPU. The combined teachings of Chauvel and Sussman fail to teach or suggest memory managed by a coprocessor, much less "an X-data cache for storing a first data group managed by the

coprocessor; and a Y-data cache for storing a second data group managed by the coprocessor" as claimed in Claims 1, 5, 9, and 17.

Claims 2-4 depend from Claim 1. Claims 6-8 depend from Claim 5. Clams 10-16 depend from Claim 9. Claims 18-20 and 22-24 depend from Claim 17. The dependent claims are believed to be allowable for at least the reasons given for the respective independent claims. The Examiner's reconsideration of the rejection is respectfully requested.

For the forgoing reasons, the application, including Claims 1-25, is believed to be in condition for allowance. Early and favorable reconsideration of the case is respectfully requested.

Respectfully submitted,

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